

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-3, 6-8, 11, 13, 15-17, 20-22, 25, 27, 29 and 30 are pending in this application. No claim amendments are presented, thus no new matter is added.

In the Office Action, Claims 1-3, 6-8, 11, 13, 15-18, 20-23, 25, 27 and 29 are rejected under 35 U.S.C. §103(a) as unpatentable over Wang et al ("Policy-Enabled Handoffs Across Heterogeneous Wireless Networks", herein Wang) in view of Ashwood Smith (U.S. Pat. 7,296,087).

In response to the rejection based on Wang and Ashwood Smith, Applicants respectfully submit that amended independent Claims 1, 6, 11, 15, 20, 25, 29 and 30, recite novel features clearly not taught or rendered obvious by the applied references.

Independent Claim 30, for example, recites, in part, a link manager comprising:

...a processor configured to define a plurality of link metrics, each link metric being defined by a plurality of characteristics of each detected link;  
an interface configured to receive an input to rank said respective link metrics and receive an input to rank each of said plurality of characteristics defining each of said respective link metrics; and  
a processor configured to select a link by ***analyzing each link based on each individual stored metric in order of rank***, and select a link corresponding to a record having ***a characteristic with a highest rank thus assigned, at a link metric with a highest rank***.

Independent Claims 1, 6, 11, 15, 20, 25 and 29, while directed to alternative embodiments, recite similar features. Accordingly, the arguments presented below are applicable to each of independent Claims 1, 6, 11, 15, 20, 25, 29 and 30.

In rejecting the above noted features recited in independent Claim 30, the p. 13 of the Office Action concedes that "[w]hile Wang teaches determining link metrics (such as length of route and cost), ranking the metrics (through the use of weights), and shows that link metrics are represented by various characteristics... Wang however does not explicitly state

that each link metric is represented by a plurality of characteristics.” In an attempt to remedy this deficiency, the Office Action relies on Ashwood Smith and asserts that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to arrive at Applicants claims. Applicants respectfully traverse this rejection, as Wang, even if combined with Ashwood Smith, fails to teach or suggest “select[ing] a link by analyzing each link based on *each individual stored metric in order of rank*, and select[ing] a link corresponding to a record having *a characteristic with a highest rank thus assigned, at a link metric with a highest rank*,” as recited in independent Claim 30.

As described in an exemplary embodiment at p. 16, l. 19 – p. 18, l. 10 and Fig. 7 of the instant specification, the link manager 1 sorts the records in the link management table shown in Fig. 6, using the link metric (e.g. cost, quality, security, communication time, etc.) with the highest priority in Fig. 4 as a key. Ranks indicating preference levels are assigned to the plurality of characteristics within each metric. Particularly, Fig. 8 is a diagram showing the ranks of the plurality of characteristics corresponding to each of the respective link metrics. For example, as to the data corresponding to the link metric "cost," "free" is provided with the highest priority and "time-based" with the lowest priority. If two links have a link metric corresponding to “cost” that is equal, then the second ranked link metric (e.g., “link type”) is analyzed and each of the ranked characteristics of that metric are analyzed to determine the most desirable link, and so on.

Thus, each link metric (e.g., cost, link type, tolerable speed, etc.) are ranked, and each of the characteristics corresponding to each of these link metrics (e.g., free, flat rate, high speed, low speed, etc.) are also ranked. Based on both sets of rankings, an appropriate link is selected.

Turning to the applied references, Wang describes a system to enable handoffs between a plurality of links provided to a mobile station. Wang describes at p. 55, col. 2, ll.

29-35 that users may specify the importance or weights of each normalized parameter corresponding to characteristics of a specific link. These weights are then combined in a simultaneous calculation to determine a “cost function” or similar cumulative parameter corresponding to a specified network in order to determine the best available link.

As described at p. 55, col. 2, ll. 17-28 of Wang, each of a plurality of link metrics (e.g., bandwidth, access, cost) are normalized and weighted by a user to arrive at an overall “cost” of each link. This “cost” is the parameter used to determine which link will subsequently be selected. Therefore, even if each of the link metrics (e.g., bandwidth, access, cost) in Wang were to be represented by a plurality of characteristics, as asserted in the office action, these characteristics would be included in the cost calculation as one of the overall parameters representing a link metric, and the link would still be selected on the basis of the overall “cost” of each link.

Therefore, Wang, even if combined with Ashwood Smith fails to disclose “select[ing] a link by analyzing each link based on *each individual stored metric in order of rank*, and select[ing] a link corresponding to a record having *a characteristic with a highest rank thus assigned, at a link metric with a highest rank*,” as recited in independent Claim 30. As described above, this claimed configuration results in analyzing a link *individually*, metric by metric, by analyzing each *ranked characteristic* of each link metric based on the ranks of the individual characteristics. In contrast, if each of the link metrics in Wang were to be represented by a plurality of characteristics, these characteristics would merely be used to represent a metric in equation (1), for example, of Wang resulting in the characteristics being normalized similar to the link metrics themselves to calculate a “cost” of each link.

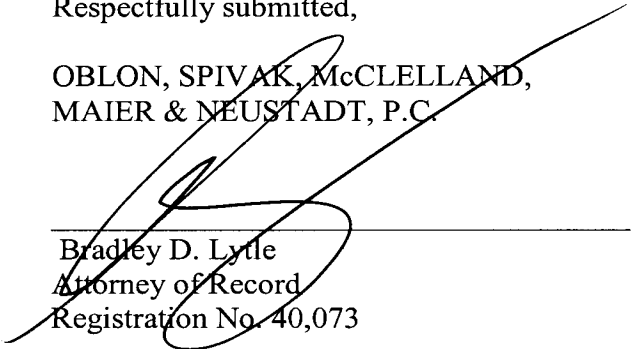
Accordingly, Applicants respectfully submit that new independent Claim 30 patentably defines over Wang and Ashwood Smith. For substantially similar reasons, it is also submitted that independent Claims 1 6, 11, 15, 20, 25 and 29 also patentably define over

Wang and Ashwood Smith, and Applicants respectfully request that the rejection of these claims (and the claims that depend therefrom) under 35 U.S.C. §103 be withdrawn.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-3, 6-8, 11, 13, 15-17, 20-22, 25, 27, 29 and 30 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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